CDC Influenza Division Key Points May 23, 2014

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Please note, this is the final issue of CDC (Seasonal) Influenza Division Key Points for the 2013-2014 influenza season. After today, seasonal influenza key points will no longer be released on a fixed schedule, but will be issued as they are warranted, such as in conjunction with the release of important flu-related publications or guidance or unexpected increases in flu activity. Full reporting for the 2014-2015 influenza season will begin October 10, 2014 for Week 40 and appear in the weekly influenza surveillance report, FluView.

Summary Key Messages

- The current <u>FluView</u> report indicates that seasonal influenza activity is declining nationally, though sporadic flu activity may continue in parts of the country for some time.
- While H1N1 viruses have predominated overall this season, influenza B viruses have been the most common nationally for the past several weeks.
- Most of the influenza B viruses that have been analyzed (about 70%) are like the influenza B component in the 2013-14 trivalent influenza vaccine.
- The remaining influenza B viruses that have been analyzed are like the second B component in the 2013-14 quadrivalent vaccine.
- A reminder to influenza vaccine providers: the 2013-2014 season flu vaccine expires on June 30, 2014.
- After this date, flu vaccine will not be available until supplies from the manufacturer for the 2014-2015 season begin to arrive (see Message to Health Care Providers below).
- CDC continues to recommend vaccination as long as influenza viruses are circulating, but people who have already been vaccinated this season do not need to get vaccinated again.
- Ongoing vaccination is recommended for the following people:
 - People in institutional outbreak settings,
 - o Children needing to complete the second dose in their two-dose regimen, and
 - People preparing to travel to the Southern Hemisphere, which is entering its flu season.

- CDC is urging travelers who plan to attend the FIFA World Cup 2014 in Brazil this summer to get a flu vaccine before they go, if they have not yet been vaccinated. It takes two weeks following vaccination for the body to develop protective antibodies against flu infection. See the related Flu Spotlight, "World Cup 2014: Travelers to Brazil Urged to Get Flu Vaccine."
 - At this point in the year, people may have to check with more than one vaccine provider in order to locate vaccine.
 - Additional travel tips for those traveling to the FIFA World Cup are available at <u>wwwnc.cdc.gov/travel/notices/watch/world-cup-brazil</u>.
- For more information on preventing flu while traveling, see Influenza Prevention: Information for Travelers (www.cdc.gov/flu/travelers/travelersfacts.htm).
- Stay up-to-date with influenza information throughout the summer by visiting the <u>CDC</u> <u>flu website</u>.
- Visit http://www.cdc.gov/flu/whatsnew.htm to sign up for Influenza email updates from CDC.

FluView Activity Update

- According to the latest <u>FluView</u> report, seasonal flu activity is low and declining, though flu viruses continue to circulate and cause illness in the United States.
- Below is a summary of the key indicators for the week ending May 17, 2014 (week 20):
 - For the week ending May 17, the national proportion of people seeing their health care provider for influenza-like illness (ILI) decreased and has now been below the national baseline of 2.0% for ten weeks. ILI was above or at baseline for 15 weeks this season. One of 10 regions (Region 1) reported ILI above region-specific baseline levels. Additional information regarding regional activity and previous seasons is available through <u>FluView Interactive</u>.
 - Forty-nine states and New York City experienced minimal ILI activity. One state (Texas) experienced low <u>ILI activity</u>. The District of Columbia did not have sufficient data to calculate an activity level. ILI activity data indicate the amount of flu-like illness that is occurring in each state.
 - Two states (Maryland and New York) reported widespread <u>geographic influenza</u> <u>activity</u>. This is a slight decrease from the three states that reported widespread activity in the previous week. Guam and five states reported regional activity. Six states reported local activity. Puerto Rico, the District of Columbia, and 32 states reported sporadic influenza activity. Five states (Arkansas, Kansas,

- Mississippi, North Carolina, and Tennessee) reported no influenza activity. The U.S. Virgin Islands did not report. Geographic spread data show how many areas within a state or territory are seeing flu activity.
- 9,632 laboratory-confirmed <u>influenza-associated hospitalizations</u> have been reported since October 1, 2013. This translates to a cumulative overall rate of 35.6 hospitalizations per 100,000 people in the United States. More data on hospitalization rates are available through <u>FluView Interactive</u>.
 - The highest hospitalization rates are among people 65 and older (88.1 per 100,000), followed by people 50-64 years (54.3 per 100,000) and children younger than 5 years (46.7 per 100,000). During most seasons, children younger than 5 years and adults 65 years and older have the highest hospitalization rates.
 - Of the 9,632 influenza-associated hospitalizations that have been reported this season, approximately 60% have been in people 18 to 64 years old. This trend of increased hospitalizations among younger people was also seen during the 2009 H1N1 pandemic.
 - Hospitalization data are collected from 13 states and represent approximately 8.5% of the total U.S. population. The number of hospitalizations reported does not reflect the actual total number of influenza-associated hospitalizations in the United States.
- The <u>proportion of deaths</u> attributed to pneumonia and influenza (P&I) based on the 122 Cities Mortality Reporting System decreased to 5.8% and remains below the epidemic threshold (6.8%).
- One influenza-associated pediatric death was reported to CDC during the week of May 11-17, 2014 (week 20). This death was associated with an influenza B virus and occurred during week 19 (week ending May 10, 2014). A total of 95 influenza-associated pediatric deaths have been reported for the 2013-2014 season at this time. Additional information about reported pediatric deaths during this season and previous seasons is available through <u>FluView</u> <u>Interactive</u>.
- Nationally, the percentage of <u>respiratory specimens</u> testing positive for influenza viruses in the United States during the week ending May 17, 2014 decreased to 8.7%. Averaged over the last three weeks, the regional percentage of respiratory specimens testing positive for influenza viruses ranged from 4.0% to 16.8%.
- Influenza A (H3N2), 2009 H1N1, and influenza B viruses have all been identified in the U.S. this season. 2009 H1N1 viruses have predominated overall during the 2013-14 season, though influenza B viruses have accounted for the largest

proportion of circulating viruses during the past two months and the proportion of influenza A (H3) viruses has been increasing as well. During the week ending May 17, 139 (41.0%) of the 339 influenza-positive tests reported to CDC were influenza A viruses and 200 (59.0%) were influenza B viruses. Of the 50 influenza A viruses that were subtyped, all were H3 viruses.

- CDC has antigenically characterized 2,815 influenza viruses; 2,008 2009 H1N1 viruses, 426 influenza A (H3N2) viruses, and 381 influenza B viruses, collected since October 1, 2013.
 - 2,005 (99.8%) of the 2,008 2009 H1N1 viruses tested were characterized as A/California/7/2009-like. This is the influenza A (H1N1) component of the Northern Hemisphere quadrivalent and trivalent vaccines for the 2013-2014 season.
 - 406 (95.3%) of the 426 influenza A (H3N2) viruses tested were characterized as Texas/50/2012-like. This is the influenza A (H3N2) component of the Northern Hemisphere quadrivalent and trivalent vaccines for the 2013-2014 season.
 - 269 (70.6%) of the 381 influenza B viruses tested belonged to the B/Yamagata lineage of viruses. 268 (99.6%) of these 269 viruses were characterized as B/Massachusetts/02/2012-like. This is an influenza B component for the 2013-2014 Northern Hemisphere quadrivalent and trivalent influenza vaccines.
 - The 112 (29.4%) other influenza B viruses belonged to the B/Victoria lineage of viruses, and were characterized as B/Brisbane/60/2008-like. This is the recommended influenza B component of the 2013-2014 Northern Hemisphere quadrivalent influenza vaccine.
- Since October 1, 2013, CDC has tested 5,100 2009 H1N1, 667 influenza A (H3N2), and 505 influenza B virus samples for <u>resistance</u> to the neuraminidase inhibitor influenza antiviral drugs. So far this season, 59 (1.2%) 2009 H1N1 viruses have shown resistance to oseltamivir. No influenza A (H3N2) or influenza B viruses have shown resistance to oseltamivir. No viruses have shown resistance to zanamivir.
 - The neuraminidase inhibitors oseltamivir and zanamivir are currently the only recommended influenza antiviral drugs.
 - As in recent past seasons, high levels of resistance to the adamantanes (amantadine and rimantadine) continue to persist among 2009 H1N1 and influenza A (H3N2) viruses. Adamantanes are not effective against influenza B viruses. Adamantanes are not recommended for use against influenza this season.

<u>FluView</u> is available – and past issues are <u>archived</u> – on the CDC website.

Note: Delays in reporting may mean that data changes over time. The most up to date data for all weeks during the 2013-2014 season can be found on the current <u>FluView</u>.

Influenza-Associated Pediatric Death

- One influenza-associated pediatric death was reported to CDC for the week ending May 17, 2014 (week 20).
- This brings the total of influenza-related pediatric deaths that have been reported for the 2013-2014 flu season to 95.
- Additional information regarding pediatric deaths is available through <u>FluView</u> <u>Interactive</u>.
- A pediatric death is a death in a person who is a U.S. resident and younger than 18 years old from an illness associated with infection with an influenza virus.
- During the 2012-2013 influenza season, a total of 171 influenza-associated pediatric deaths were reported to CDC.
- A review of the available pediatric death reports from the 2012-2013 season indicates that:
 - Of the 164 deaths in which the child's medical history was known, 55% occurred in children who had underlying medical conditions that placed them at high risk of developing serious flu-associated complications. However, 45% had no recognized underlying health problems.
 - The proportions of pediatric deaths that occurred in unvaccinated children and among children with underlying medical conditions that placed them at high risk from flu complications are largely consistent with what has been seen in the past.
- Since 2004, when flu-associated pediatric deaths became a nationally notifiable condition, the number of deaths reported to CDC each season has ranged from 35 (2011-2012 season) to 171 (2012-2013 season).
- During the 2009 H1N1 pandemic April 15, 2009 to October 2, 2010 348 pediatric deaths were reported to CDC.
- These deaths are a somber reminder of the danger flu poses to children.
- The single best way to protect children against seasonal flu and its potential severe consequences is to have them receive a seasonal flu vaccine each year.

- Among children, vaccination is especially important for those younger than 5 years of age and those of any age with an underlying medical condition like asthma; a neurological, neuromuscular or neurodevelopmental disorder; or immune suppression. These children are at higher risk of serious complications if they get the flu.
- Yearly vaccination also is especially important for people who come in contact with high risk children in order to protect the child (or children) from the flu.
- Even previously healthy children can become seriously ill if they get the flu. Data on laboratory-confirmed influenza hospitalizations during the 2012-2013 flu season indicated that 46% of children hospitalized with the flu had no identified underlying medical conditions.
- Flu-associated deaths in children younger than 18 years old should be reported through the Influenza-Associated Pediatric Mortality Surveillance System. The number of flu-associated deaths among children reported during the 2013-2014 flu season is updated each week and can be found at http://www.cdc.gov/flu/weekly/.
- Additional information about the pediatric deaths, including basic demographics, underlying conditions and week and place of death, for the 2013-2014 season as well as past influenza seasons, is available through the Influenza Associated Pediatric Mortality application of <u>FluView Interactive</u> at http://gis.cdc.gov/GRASP/Fluview/PedFluDeath.html.

Message to Health Care Providers: Ordering 2014-2015 Flu Vaccine

- The 2014-2015 influenza vaccine can be ordered at this time from manufacturers.
- Both trivalent and quadrivalent flu vaccines are being offered during 2014-15.
- Trivalent vaccine offers important protection from flu. Ordering flu vaccine should not be delayed if quadrivalent flu vaccine is not available.